#### **TIIAP Status Report**

### **Evaluation of ADS Homecare Technology Systems**

I. The Plan. Attachment A is the analysis plan prepared for the process and outcome evaluation of the implementation of two databases intended to improve homecare services administered by Aging and Disability Services in Seattle, Washington. The original analysis questions have stood the test of time, while specific data items have been revised several times as instruments were developed and reviewed by the individuals most involved. The methodology described in Attachment A has been revised in several important ways, notably:

#### With respect to Question 1:

- Monthly progress reports were not available to the evaluator; rather data on implementation and problems encountered will be first collected in a focus group with ADS staff to be held on August 23, 1999.
- Rather than quarterly evaluation team meetings, we will piggyback a discussion of the outcome evaluation on to quarterly meetings that are scheduled with the Case Managed Care group. The first of these is scheduled for October 28 and these will be held every quarter thereafter.
- This is the first written summary of progress. Another written progress report will be prepared in January of 2000 that covers the experience from August through December, 1999.

With respect to Question 2, 282 surveys were administered to clients and the methodology outlined was followed.

#### With respect to Question 3:

- Both the original approach to obtaining baseline data from homecare aides and several other ideas have not proved possible. Workers at both of the two large homecare agencies have already been exposed to new time tracking systems. Also getting data by any method from home care aides is very challenging. Our current thinking is that we will collect data much later in the process from a focus group of home care aides at each of the larger agencies, after all have had some considerable experience being a part of time tracking. We will attempt to make sure that some of the participants have had experience with both the old and new systems.
- The methodology for getting data from supervisors was followed.

With respect to Question 4, the methodology for getting data from homecare agency financial workers was followed.

With respect to Question 5, the methodology was followed.

With respect to Question 6:

- The only baseline data that could be obtained was that describing agency market share.
- The baseline for authorized and delivered hours will be the fourth quarter of 1998. After the home care referral database is implemented this fall, authorized and delivered hours will be reported every six months and compared to that baseline.
- A baseline for agency response time will be constructed from the survey of case managers and then will be monitored every six months.

With respect to Question 7, HCS case managers (state employees) have also been asked to provide baseline data.

- II. <u>The Timeline.</u> Attachment B shows the status of each data-related task. Major deviations from the projected timeline include:
  - Instruments were sent late to homecare agency supervisors and financial staff, so their data will not be included in this report.
  - 30 HCS (state case managers) staff agreed to complete the case manager baseline survey but their responses have not yet been received.
  - Baseline data (last quarter of 1998) on authorized and delivered hours have not yet been compiled.
- III. <u>The Data.</u> Data from clients, case managers, ADS accounting staff, and agency market share are attached and important findings are summarized below.

#### **Client Data (see Attachment C)**

- 170 clients of the 282 sampled responded.<sup>1</sup>
- 69% of clients report their workers always come on time
- Another 25% state their workers usually come on time
- 93% of the workers stay the whole time, according to clients.
- 90% of the clients are always or usually comfortable signing their worker's timesheets.
- It will be hard to beat this level of quality.

#### **Case Manager Data (see Attachment D)**

- 80% of case managers found it not very easy or impossible to access data on homecare agency performance. 60% seldom or never use such data.
- 58% found it not very easy or impossible to access data on client's homecare aide's performance. 40% seldom or never use such data.

<sup>&</sup>lt;sup>1</sup> Phone numbers or other important demographic data were not updated 14% of the time. Some LES clients were instructed not to answer the phone.

- It takes 96 minutes on average to "make a referral to homecare."
- 55% of case managers report it takes from 3-6 days between the time they make a referral and the start-up of service. 39% report it takes 7-14 days.
- 58% of case managers have a problem knowing if the referred case has actually been staffed.
- Most think the referral process is somewhat or quite easy; a significant minority (38%) think it is somewhat or very difficult.
- 87% of case managers already make more referrals to agencies that respond more quickly.
- Nearly one-third state it takes a long time before they become aware of homecare aide problems (or they never do).
- Once they know about a problem, 59% find it somewhat or quite easy to intervene in the solution of the problem.
- 86% do not create any computer-generated reports to understand more about the homecare services their clients receive.

#### **Accounting Technician Data (see Attachment E)**

- The technicians spend an average of 67 hours each month working with the forms and reports they receive from homecare agencies.
- They find it somewhat easy to process these reports.
- One sometimes creates customized computer reports of data; the other seldom does.

#### **Agency Market Share Data (see Attachment F)**

- Catholic Community Services has 39% of the market
- Sea-Mar has 17%
- Armstrong Uniserve has 13%
- Fremont has 10%
- The remaining 9 agencies have between 1% and 6% of the market

#### Attachment A

#### **ANALYSIS PLAN for**

## Homecare Aide Time Tracking and Homecare Referral Systems: Process and Outcome Evaluation

- 1. Were time tracking and homecare referral systems implemented as planned?
  - a) Compare planned implementation timeline to actual implementation dates
  - b) What implementation problems were encountered?
  - c) What were they?
  - d) How were they overcome?
  - e) What, in retrospect, would you have done differently?

#### **Methodology:**

- Review monthly progress reports
- Meet quarterly with Evaluation Team
- Prepare six-month and 12-month written summaries of progress, with interpretation (June and December, 1999)
- 2. Do clients experience services as *more reliable* after implementation of the time tracking system?
  - a) Clients' perceptions of the system's reliability will be measured by asking at least these three questions<sup>2</sup>:
    - 1) does your worker arrive promptly at your home?
    - 2) does your worker stay as long as you believe he/she should stay?
    - 3) Have you ever felt uncomfortable when signing a worker's timesheet because you felt they had not stayed for the time they said they had?<sup>3</sup>

#### Methodology:

a pre-test will be done as part of "live" training

 a 5-minute telephone survey will be conducted by members of the ADS Advisory Council every six months, beginning with baseline data collection in March, 1999

<sup>&</sup>lt;sup>2</sup> In addition, based on the pre-test, we may add one or two additional questions, but we want to focus on reliability rather than satisfaction. We don't want to ask clients exactly how many hours they received because that is an objective measure that can be obtained through ADS records based on what the agencies report to ADS.

<sup>&</sup>lt;sup>3</sup> This may or may not work as a question. We will try it in the pre-test. It is being included because if it is something clients experience at baseline, clearly the time tracking system would remove that concern for clients.

- it will be administered to a 10% sample of personal care clients (200<sup>4</sup>), with the actual number to be surveyed stratified by agency according to its share of the total county caseload
- ten volunteers (advisory council members and others would each call 20 clients. the interviews should take no longer than 15 minutes (5 hours per volunteer) and could be done from home.
- volunteers will be given the name of someone to call if they run into any problem; they will also be trained on who they should tell the client to contact if he or she expresses concerns beyond the scope of the interview.
- for L/NES clients, ADS will need to hire special interviewers or make arrangements with CISC, ACRS, etc.
- clients will receive letters ahead of time<sup>5</sup> letting them know of the survey and informing them of their right to decline to be interviewed; they may also decline at the time they are called for the interview; the interviewer must tell them immediately that they have the right to decline and also that participation will not affect the service they receive in any way<sup>6</sup>
- no client information will be recorded by the interviewer; they will have a face sheet with the client's first and last name and phone number only; after the interview is completed, a unique client identifier will be placed on each instrument, and the face sheet will be shredded at ADS
- 3. Is the time tracking system more efficient for homecare aides and supervisors?
  - a) Assess homecare *aide* perceptions by asking these questions<sup>7</sup>:
    - 1) Have you worked here more than six months?
    - 2) How easy is it to use the current system for reporting the time you spend with your clients?
    - 3) Do you like this way of reporting your time?
    - 4) How easy was it for you to learn the current system for reporting your time?
    - 5) How much paperwork do you do in order to track your hours?
    - 6) Has a client refused to sign your timesheets?
  - b) Assess **supervisor** perceptions by asking these questions:
    - 1) Have you worked here more than six months?
    - 2) How easy is it to use the current system for reporting time spent by homecare aides with clients?
    - 3) Do you like this way for workers to report their time?

<sup>&</sup>lt;sup>4</sup> At least 300 names will need to be drawn to account for those who decline to participate or who are unable, due to frailty, illness, etc., to participate.

<sup>&</sup>lt;sup>5</sup> Homecare agency staff will also be notified of the survey timeframe so they can answer client questions.

<sup>&</sup>lt;sup>6</sup> We will provide scripts and train to the scripts.

<sup>&</sup>lt;sup>7</sup> Because of worker turnover, workers will not be asked to compare the two systems (pre- and post-time tracking implementation)

- 4) How easy was it for you to learn the current system for tracking and reporting worker time?
- 5) How much time do you spend doing paperwork for the time tracking system?
- 6) Do problems with the system make home care aide paychecks late?
- 7) How often do you deal with issues related to whether or not workers arrive and leave clients' homes on time?
- 8) Does the time tracking system make your job easier? [use check-off style response categories]
- 9) Does the time tracking system provide accountability of workers for the hours they spend with clients?
- 10) Does the time tracking help you learn about staffing problems (e.g., no-shows, workers coming late, etc.)?
- 11) Do you ever create customized computer reports related to worker hours?

#### **Methodology:**

- these questions will be asked of all workers every six months; the homecare agencies suggest ADS prepare coded, pre-paid postcards that can be returned to ADS;
- all supervisors and provider agency financial staff (see below) will be asked to respond to the questions every six months beginning in March of 1999
- 4. Has implementation of the time tracking system reduced time spent on homecare aide payroll or reporting by homecare provider agencies?

Assess impact on provider agency financial staff by asking the following questions:

- 1) Have you worked here more than six months?
- 2) How many homecare aides are on the payroll?
- 3) How much time does agency staff spend in a typical month on payroll? (in # of hours)
- 4) Please translate this into the number of full-time equivalent staff required to prepare payroll.
- 5) Does the time tracking system make your job easier?
- 6) How easy is it to compile data for reports to Aging and Disability Services?
- 7) How much time do you spend in a typical month preparing these reports to ADS?
- 8) Do problems with the time tracking system make home care aide paychecks late?
- 9) Can you get accurate and usable data on the number of authorized hours provided from the time tracking system?
- 10) Do you create customized computer reports related to worker hours?

5. Has implementation of the time tracking system or the homecare referral system improved ADS' ability to monitor agency performance?

Assess impact on ADS contract and management staff by collecting the following data:

- 1) What data or databases do you access to monitor homecare agency performance?
- 2) How easy is it for you to access data on homecare agency/worker performance?
- 3) How often do you use such data?
- 4) How accurate are the data you have/use?
- 5) Are the data adequate for monitoring homecare agency performance?
- 6) Do you create any specialized/customized reports based on these data? If so, please describe.
- 7) Are reports you receive from the homecare agencies (including billing forms) verified using databases? If so, which databases?

Assess impact on ADS finance staff by collecting the following data:

- 1) How much time do you spend in a typical month working with forms/reports you receive from homecare agencies? (estimated # of hours)
- 2) How easy is it to process reports you receive from the homecare agencies?
- 3) Does the time tracking system make your job easier?
- 4) Do you create customized computer reports related to homecare agency data?
- 5) Do you verify agency billing forms using the time tracking database?

#### Methodology:

- The primary source for the first set of data above will be a focus group to be held every six months, beginning in August, 1999.
- The source for the second set of data are two ADS Accounting Technicians who work with the agency reports.

- 6. Has implementation of the homecare aide time tracking system and the homecare referral system improved overall homecare program quality, accountability, or administrative decision-making about homecare?
  - a) % of worker no-shows, pre and post (March, 1999 and 6, 12, 18, 24 months)
  - b) % of authorized hours provided, pre and post (March, 1999 and 6, 12, 18, 24 months)
  - c) % of clients that receive level of service authorized
  - d) changes in market share of high-performing providers, pre and post (March, 1999 and 6, 12, 18, and 24 months later)
  - e) dynamism in the system; ability to respond quickly?

#### **Methodology:**

- Baseline data will come from a variety of sources.
- After that, data will come from the new databases. A form will be developed to capture these data for evaluation purposes.
- To define "high-performing" providers, we will develop frequency distributions based on the % of authorized hours provided and the % of clients that receive authorized service levels. This distribution will be compared to the % of total clients served by that agency. Focus groups may also be used.
- 7. Has implementation of the homecare referral system improved the system from the perspective of case managers? Is the process more efficient/less burdensome for them? Is it faster? Do clients receive initial services more quickly? Do case managers become aware of serious problems sooner? Is their ability to intervene in problem solution enhanced?

Assess impact of system implementation from the perspective of case managers by asking these questions:

- 1) How accessible to you are accurate and usable data on homecare provider performance?
- 2) Do you use these data?
- 3) If not, why not?
- 4) At this point in time, how much time do you spend "making a referral to homecare"?
- 5) On average, how much time does it take from the time you make a referral to a homecare agency and the start-up of service for the client?
- 6) How burdensome is the referral process?
- 7) Do you make more referrals to agencies that can respond more quickly to your referrals?

- 8) How long does it take before you become aware that there are problems with homecare aide services like worker reliability?
- 8) Do you access the time tracking database? (if yes, how often? if no, why not?
- 9) How often do you access the homecare referral database?
- 10) If yes, are there any problems you encounter?
- 11) Do you look up information in the database about your individual clients? about your clients as a group? (if yes, how often?)
- 12) How easy is it for you to intervene in the solution of these problems?
- 13) After an agency has accepted a case, do you have a problem knowing if the case has actually been staffed?
- 14) Do you use reports produced by either the Homecare Referral or the Homecare Aide Time Tracking systems?
- 15) Do you create any customized, computer-generated reports in order to understand more about your clients' homecare services?

#### **Methodology:**

- All case managers who work for ADS, Evergreen, ACRS, CISC, and other contract agencies will be asked to fill out an e-mail survey form in March, 1999 and every six months thereafter throughout the grant.
- A focus group with representation from each case management agency, will be held six months after implementation of the Homecare Referral system to obtain richer, more qualitative data.
- In March of 1999, case managers will be given the e-mail survey for the first time, along with a checklist so they can track important issues as these arise.

### **Attachment B Task Completion Checklist**

Data Component	Measures Drafted	Instrument Designed	Collateral Materials Prepared	Reviewed/ Piloted	Training Provided	Data Collected	Data Analyzed
A. Client survey	Yes	Yes	Yes	Yes/Yes	Yes	Yes	Yes
B. Home care aide instrument	Yes	Yes	Yes	Yes <sup>8</sup>	NA	No	No
C. Supervisor/financial staff instruments	Yes	Yes	Yes	Yes/NA <sup>9</sup>	NA	No	No
D. Case manager survey	Yes	Yes	Yes	Yes/Yes	NA	Yes <sup>10</sup>	Yes
E. ADS staff survey and focus group questions <sup>11</sup>	Yes	Yes	Yes	Yes	NA	Baseline focus group to be held in late August	No
F. Overall system measures	Yes	NA	NA	NA	NA	Partially <sup>12</sup>	Partially

 <sup>&</sup>lt;sup>8</sup> Decided not to collect baseline data. Need to revise questions based on new methodology.
 <sup>9</sup> First data collection will occur in late July and will be treated as both the pilot and the baseline measurement.
 <sup>10</sup> Waiting for data from 30 HCS case managers
 <sup>11</sup> One set of questions for ADS Accounting Technicians, and one for other ADS staff.
 <sup>12</sup> Awaiting data on authorized and provided hours for last quarter of 1998.

# **Attachment C Client Data**

Responses	Q1: On Time	Q2: Stays the whole	Q3: Comfort with
		time	timesheet
	# %	# %	# %
Always	117 69%	118 69%	135 79%
Usually	42 25%	40 24%	19 11%
Seldom	5 3%	4 2%	5 3%
Never	3 2%	2 1%	2 1%
Other	3 2%	6 4%	9 5%
	<u> </u>		
Total	170 100%	170 100%	170 100%
Average score	4	3.67	3.78
_			
No Responses	84		
wrong number	31	Sample Si	ize: 282
no answer	22	# of Resp	
no caregiver	10	No Respo	
refused to	5	Not Calle	d: 28
participate			
Died	4		
communication	4	-	ecare Billing Database
no area code	3	Data from November	
sick	1	Letters sent to clients l	•
expired svc	1	Calls were made durin	g
		March	
not a client	1		
confusion	1		
caregiver always	1		
answered phone			

Attachment D
Case Manager Data

Q1: How easy is it to access accurate	# of responses	% of	Q2:How often do you use	# of	% of responses
data on homecare agency		responses	such data?	responses	
performance?					
(a) very easy to access such data	1	1.6%	(a) I often use such data	8	12.9%
(b) somewhat easy to access	9	14.5%	(b) I sometimes use such	14	22.6%
			data		
(c) not very easy to access	28	45.2%	(c) I seldom use such data	10	16.1%
(d) impossible to access	19	30.6%	(d) I never use such data	27	43.5%
n/a	5	8.1%	n/a	3	4.8%

Q3: How easy is it to access accurated at a on the performance of your	e # of responses		Q4:How often do you use such data?	# of responses	% of responses
client's home care aides?					
(a) very easy to access such data	2	3.2%	(a) I often use such data	12	19.0%
(b) somewhat easy to access	19	30.6%	(b) I sometimes use such	23	36.5%
			data		
(c) not very easy to access	27	43.5%	(c) I seldom use such data	15	23.8%
(d) impossible to access	9	14.5%	(d) I never use such data	10	15.9%
n/a	5	8.1%	n/a	3	4.8%

Q5: How much time do you	# of responses	Average	Q6: On average, how	# of	% of responses
spend "making a referral to		Time	much calendar time does it	responses	
homecare"?			take from the time you		
			make a referral to start-up		
			of service?		
	56	96.16 m	(a) 1-2 days	1	1.6%
			(b) 3-6 days	34	54.8%
			(c) 7-14 days	24	38.7%
			(d) more than 14 days	1	1.6%
			(e) other	1	1.6%
			n/a	1	1.6%

Q7: After an agency has accepted a case, do you have a problem knowing if the case has actually been staffed?	# of responses		Q8: How easy or difficult is the referral process?	# of responses	% of responses
(a) always	6	9.7%	(a) quite easy	16	25.4%
(b) usually	30	48.4%	(b) somewhat easy	22	34.9%
(c) seldom	18	29.0%	(c) somewhat difficult	18	28.6%
(d) never	3	4.8%	(d) very difficult	6	9.5%
(e) other	4	6.5%	n/a	1	1.6%
n/a	1	1.6%			

Q9: Do you make more	# of	% of	Q10: How long, on	# of	% of
referrals to agencies that	responses	responses	average, does it take	responses	responses
respond more quickly?			before you become		
			aware of problems with		
			a client's homecare aide		
			services?		
(a) yes	54	87.1%	(a) I find out very soon	12	19.7%
(b) no	3	4.8%	(b) It takes amoderate	28	45.9%
			amount of time		
(c) other	5	8.1%	(c) It takes a long time	15	24.6%
			(d) I don't find out at all	4	6.6%
			n/a	2	3.3%

Q11: How easy is it for you to	# of	% of	Q12: Do you create any	# of	% of
intervene in the solution of these	responses	responses	customized, computer-	responses	responses
problems?			generated reports in		
			order to understand		
			more about your clients'		
			homecare services?		
(a) quite easy	11	18.6%	(a) yes	7	11.3%
(b) somewhat easy	24	40.7%	(b) no	53	85.5%
(c) somewhat difficult	18	30.5%	(c) other	1	1.6%
(d) very difficult	4	6.8%	n/a	1	1.6%
n/a	2	3.4%			

#### Attachment E Accounting Technician Data

For each question below, please circle the letter that corresponds to your answer.

Thank you. Please return your completed survey to Andrea Chidsey at Aging and Disability Services.

- How much time do you spend in a typical month working with forms/reports you receive from homecare agencies? Please estimate the number of hours.
   73, 60
- 2. How easy is it to process reports you receive from the homecare agencies?
  - a. Very easy
  - b. Somewhat easy (2)
  - c. Somewhat hard
  - d. Very hard
- 3. Does the time tracking system make your job easier?
  - a. Often
  - b. Sometimes
  - c. Seldom
  - d. Never (2)

- 4. Do you ever create customized computer reports related to homecare agency data?
  - a. Often
  - b. Sometimes (1)
  - c. Seldom (1)
  - d. Never
- 5. Do you verify agency billing forms using the time tracking database?
  - a. Always
  - b. Often
  - c. Sometimes
  - d. Seldom
  - e. Never (2)

# Attachment F Agency Market Share Data

Agency	# of Clients	# of Units	Amount Paid	Participat ion
Amicable Healthcare, Inc.				
Sum	129	8007	\$86,184.31	\$4,535.00
Average		62.07	\$668.10	
Percent	6.09%	7.77%	7.57%	
Arcadia Health Services				
Sum	2	179	\$2,028.07	\$0.00
Average		89.50	\$1,014.04	
Percent	0.09%	0.17%	0.18%	
Armstrong Uniserve				
Sum	266	15359	\$169,074.16	\$4,943.31
Average		57.74	\$635.62	
Percent	12.56%	14.91%	14.85%	
Catholic Community Services				
Sum	836	34294	\$380,544.10	\$7,893.29
Average		41.02	\$455.20	
Percent	39.47%	33.29%	33.41%	
Chesterfield Health Services				
Sum	64	4308	\$46,923.55	\$1,886.09
Average		67.31	\$733.18	
Percent	3.02%	4.18%	4.12%	
Fremont Public Association				
Sum	205	8071	\$89,815.91	\$1,628.52
Average		39.37	\$438.13	
Percent	9.68%	7.84%	7.89%	
Kin On Homecare				
Sum	41	2929	\$32,931.10	\$254.47
Average		71.44	\$803.20	
Percent	1.94%	2.84%	2.89%	
On Your Own				
Sum	1	266	\$3,013.78	\$0.00
Average		266.00	\$3,013.78	
Percent	0.05%	0.26%	0.26%	
Professional Choice				
Sum	28	2862	\$30,803.17	\$1,238.07
Average		102.21	\$1,100.11	
Percent	1.32%	2.78%	2.70%	

Agency	# of Clients	# of Units	Amount Paid	Participat ion
Sea-Mar				
Sum	358	15702	\$173,761.42	\$4,142.24
Average		43.86	\$485.37	
Percent	16.90%	15.24%	15.26%	
St. Jude Healthcare				
Sum	69	4223	\$46,486.86	\$1,359.73
Average		61.20	\$673.72	
Percent	3.26%	4.10%	4.08%	
Triarm				
Sum	106	6513	\$74,308.54	\$1,548.84
Average		61.44	\$701.02	
Percent	5.00%	6.32%	6.52%	
Visiting Nurse Services				
Sum	13	291	\$3,046.01	\$259.75
Average		22.38	\$234.31	
Percent	0.61%	0.28%	0.27%	
Grand Total	2118	103004	\$1,138,920.98	\$29,689.31